Building Site Development

General

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns, landscaping, and golf fairways.

Shallow Excavations

Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewerlines, telephone and power transmission lines, basements, open ditches, and cemeteries. The excavations are most commonly made by trenching machines or backhoes. The ratings are based on the soil properties that influence ease of digging and resistance to sloughing.

Dwellings With or Without Basements

These are single-family houses of three stories or less. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper, for houses without basements, or at a depth of 7 feet if a basement is constructed. The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs.

Small Commercial Buildings

Limitation ratings are given for undisturbed soil on which small commercial buildings of less than three stories without basements are built. The foundation is assumed to be spread footings of reinforced concrete at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

Local Roads and Streets

Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing, commonly of asphalt, gravel with binder in it, or concrete, and that are expected to carry automobile traffic all year. These roads and streets are graded to shed water, and conventional drainage measures are provided. With the probable exception of the hard surface, roads and streets are built mainly from the soil at hand.

Lawns, Landscaping, and Golf Fairways

The soils are rated for their use in establishing and maintaining turf for lawns and golf fairways and ornamental trees and shrubs for residential type landscaping. The ratings are based on the use of soil material at the location with some land smoothing. Irrigation may or may not be needed and is not a criterion in rating. Traps, tees, roughs, and greens are not considered as part of the golf fairway. The properties considered are those that affect plant growth and trafficability after vegetation is established.

See the National Soil Survey Handbook, Part 620, for criteria used in rating specific uses.

Aroostook County, Northeastern Part

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
AGA ALLAGASH	Severe: cutbanks cave	Slight:	Slight:	Slight:	Moderate: frost action	Moderate: droughty
AgB ALLAGASH	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: droughty
AgC ALLAGASH	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: droughty, slope
AgD ALLAGASH	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
BeB BENSON	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: thin layer
BeC BENSON	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: thin layer
BeD BENSON	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: slope, thin layer

Aroostook County, Northeastern Part

The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Absence of an entry indicates that no rating is applicable.

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
CdB CANANDAIGUA	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
CgA CARIBOU	Slight:	Slight:	Slight:	Slight:	Moderate: frost action	Moderate: small stones
CgB CARIBOU	Slight:	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: small stones
CgC CARIBOU	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: slope, small stones
CgC2 CARIBOU	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: slope, small stones
CgD CARIBOU	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
CgD2 CARIBOU	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope

Aroostook County, Northeastern Part

The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Absence of an entry indicates that no rating is applicable.

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
CgE CARIBOU	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
COA CONANT	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness
COB	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness
CoC	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Severe: frost action	Moderate: wetness
DAA DAIGLE	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
DAB DAIGLE	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
DAC DAIGLE	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Severe: frost action, wetness	Severe: wetness

Aroostook County, Northeastern Part

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
EaA EASTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
WASHBURN	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: ponding
EAB EASTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
WASHBURN	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: ponding
EsB EASTON	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
WASHBURN	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: ponding
FhA FREDON	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness

Aroostook County, Northeastern Part

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
FhA HALSEY	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
FhB FREDON	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
HALSEY	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
HaA HADLEY	Slight:	Severe: flooding	Severe: flooding	Severe: flooding	Severe: frost action	Slight:
HaB HADLEY	Slight:	Severe: flooding	Severe: flooding	Severe: flooding	Severe: frost action	Slight:
HOA HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
HOB HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness

Aroostook County, Northeastern Part

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
HOC HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Severe: frost action, wetness	Severe: wetness
HVB HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
HvC HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Severe: frost action, wetness	Severe: wetness
MaA MACHIAS	Severe: cutbanks cave, wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: frost action, wetness	Severe: droughty
MAB MACHIAS	Severe: cutbanks cave, wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Moderate: frost action, wetness	Severe: droughty
MaC MACHIAS	Severe: cutbanks cave, wetness	Moderate: slope, wetness	Severe: wetness	Severe: slope	Moderate: frost action, slope, wetness	Severe: droughty
MbA MADAWASKA	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Moderate: frost action, wetness	Moderate: droughty, wetness

BUILDING SITE DEVELOPMENT

The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Absence of an entry indicates that no rating is applicable.

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
MbB MADAWASKA	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: wetness	Moderate: frost action, wetness	Moderate: droughty, wetness
MbC MADAWASKA	Severe: cutbanks cave, wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Moderate: frost action, slope, wetness	Moderate: droughty, slope, wetness
Md MADELAND	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
MhB MAPLETON	Severe: depth to rock	Moderate: depth to rock	Severe: depth to rock	Moderate: depth to rock, slope	Moderate: depth to rock, frost action	Severe: depth to rock
MhC MAPLETON	Severe: depth to rock	Moderate: depth to rock, slope	Severe: depth to rock	Severe: slope	Moderate: depth to rock, frost action, slope	Severe: depth to rock
MhC2	Severe: depth to rock	Moderate: depth to rock, slope	Severe: depth to rock	Severe: slope	Moderate: depth to rock, frost action, slope	Severe: depth to rock
MhD MAPLETON	Severe: depth to rock, slope	Severe: slope	Severe: depth to rock, slope	Severe: slope	Severe: slope	Severe: depth to rock, slope

Aroostook County, Northeastern Part

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
MmC MAPLETON	Severe: depth to rock	Moderate: depth to rock	Severe: depth to rock	Moderate: depth to rock, slope	Moderate: depth to rock, frost action	Severe: depth to rock
MmD MAPLETON	Severe: depth to rock, slope	Severe: slope	Severe: depth to rock, slope	Severe: slope	Severe: slope	Severe: depth to rock, slope
Mn MIXED ALLUVIAL LAND PD	Severe: cutbanks cave, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, frost action, wetness	Severe: flooding, wetness
MIXED ALLUVIAL LAND VPD	Severe: cutbanks cave, ponding	Severe: flooding, ponding	Severe: flooding, ponding	Severe: flooding, ponding	Severe: flooding, frost action, ponding	Severe: flooding, ponding
MOA MONARDA	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
BURNHAM	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: excess humus, ponding
Mob Monarda	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness

BUILDING SITE DEVELOPMENT

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
MOB BURNHAM	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: excess humus, ponding
MrB MONARDA	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
BURNHAM	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: excess humus, ponding
NCA NICHOLVILLE	Severe: wetness	Severe: frost action	Severe: wetness	Severe: frost action	Severe: frost action	Slight:
NCB NICHOLVILLE	Severe: wetness	Severe: frost action	Severe: wetness	Severe: frost action	Severe: frost action	Slight:
Pa MUCK	Severe: excess humus, wetness	Severe: low strength, wetness	Severe: wetness	Severe: low strength, wetness	Severe: frost action, wetness	Severe: excess humus, wetness
PEAT	Severe: excess humus, wetness	Severe: low strength, wetness	Severe: low strength, wetness	Severe: low strength, wetness	Severe: frost action, wetness	Severe: excess humus, wetness

BUILDING SITE DEVELOPMENT

The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Absence of an entry indicates that no rating is applicable.

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
PEA PERHAM	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: frost action, wetness	Moderate: large stones, small stones
PeB PERHAM	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope, wetness	Moderate: frost action, wetness	Moderate: large stones, small stones
PeC PERHAM	Severe: wetness	Moderate: slope, wetness	Severe: wetness	Severe: slope	Moderate: frost action, slope, wetness	Moderate: large stones, slope, small stones
PeD PERHAM	Severe: slope, wetness	Severe: slope	Severe: slope, wetness	Severe: slope	Severe: slope	Severe: slope
PGA PLAISTED	Moderate: dense layer	Slight:	Slight:	Slight:	Moderate: frost action	Moderate: large stones, small stones
PgB PLAISTED	Moderate: dense layer	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: large stones, small stones
PgC PLAISTED	Moderate: dense layer, slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: large stones, small stones

Aroostook County, Northeastern Part

The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Absence of an entry indicates that no rating is applicable.

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
PgD PLAISTED	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
PgE PLAISTED	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
PrB PLAISTED	Moderate: dense layer	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: large stones, small stones
PrC PLAISTED	Moderate: dense layer, slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: large stones, slope, small stones
PrD PLAISTED	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
PrE PLAISTED	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
PvB PLAISTED	Moderate: dense layer	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: large stones, small stones

Aroostook County, Northeastern Part

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
PvB HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
PvC PLAISTED	Moderate: dense layer, slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: large stones, slope, small stones
HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Severe: frost action, wetness	Severe: wetness
RaA RED HOOK	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
ATHERTON	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: ponding
RaB RED HOOK	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
ATHERTON	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action, ponding	Severe: ponding

BUILDING SITE DEVELOPMENT

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
Re RIVERWASH	Severe: cutbanks cave, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: flooding, wetness	Severe: droughty, small stones, wetness
SaA SALMON	Severe: cutbanks cave	Slight:	Slight:	Slight:	Moderate: frost action	Moderate: droughty
SAB SALMON	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Moderate: frost action	Moderate: droughty
SaC SALMON	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action, slope	Moderate: droughty, slope
Sb ROCK OUTCROP	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock
THORNDIKE	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope, small stones
SGA STETSON	Severe: cutbanks cave	Slight:	Slight:	Slight:	Slight:	Moderate: droughty, small stones

BUILDING SITE DEVELOPMENT

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Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
SgB STETSON	Severe: cutbanks cave	Slight:	Slight:	Moderate: slope	Slight:	Moderate: droughty, small stones
sgC STETSON	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: droughty, slope, small stones
SgD STETSON	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
SGE STETSON	Severe: cutbanks cave, slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
THB THORNDIKE	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, small stones
THC THORNDIKE	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock, small stones
ThD THORNDIKE	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope, small stones

BUILDING SITE DEVELOPMENT

The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Absence of an entry indicates that no rating is applicable.

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
THE THORNDIKE	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope, small stones
TKB THORNDIKE	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, small stones
TKC THORNDIKE	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock, small stones
TKD THORNDIKE	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope, small stones
TKE THORNDIKE	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope, small stones
TrE THORNDIKE	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope, small stones
ROCK OUTCROP	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock, slope	Severe: depth to rock

Aroostook County, Northeastern Part

Soil name and map symbol	Shallow Excavations	Dwellings without Basememts	Dwellings with Basements	Small Commercial Buildings	Local Roads	Lawns and Landscaping
TsB THORNDIKE	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, small stones
HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action, wetness	Severe: wetness
TsC THORNDIKE	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock, slope	Severe: depth to rock	Severe: depth to rock, small stones
HOWLAND	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope, wetness	Severe: frost action, wetness	Severe: wetness
Wn WINOOSKI	Severe: cutbanks cave, wetness	Severe: flooding	Severe: flooding, wetness	Severe: flooding	Severe: flooding, frost action	Moderate: flooding, wetness